======= WPI =======

TI - Coated wire with high rigidity - has coating comprising graft polymer of tetra:fluoroethylene-propylene] copolymer and styrene, etc. ethylene]-acrylate]-ester] copolymer and crosslinking agent

AB - J04329212 Wire is coated with a coating compsn. comprising (i) 100 pts.wt. resin compsn. prepd. by mixing graft polymer prepd. by graft polymerising tetrafluoroethylene/propylene copolymer with 5 - 50 wt.% styrene and an acrylate ester and polyvinylidene fluoride in a wt. ratio of the graft copolymer/polyvinylidene fluoride of 90/10 - 10/90, and (ii) 5 - 100 pts. wt. ethylene/acrylate ester copolymer and (iii) at least 0.5 pts.wt. crosslinking aid. The coated wire is irradiated with ionic radiation.

- The tetrafluoroethylene/propylene copolymer has a mol. ratio of 95/5 - 30/70 and contains opt. upto 50 mol.% other copolymerisable monomer (e.g., ethylene, butene-1, isobutene, (meth)acrylic acid, (meth)acrylate ester, vinyl fluoride, vinylidene fluoride etc.). The grafting monomers comprises styrene and an acrylate ester (e.g., methyl acrylate, ethyl acrylate, n-butyl acrylate, 2-ethylhexyl acrylate, etc.) used in a mol. ratio of 20 - 50 wt.%. An insufficient amt. of the styrene and acrylate ester degrades the compatibility with ethylene/vinyl acetate copolymer or ethylene/ acrylate ester copolymer and an excessive amt. degrades the heat resistance. The polyvinylidene fluoride resin contains opt. trifluoroethylene or chlorotrifluoroethylene. An excessive ratio of the graft polymer/polyvinylidene fluoride degrades the elongation and an insufficient ratio does not improve the abrasion resistance. The crosslinking aid is pref. triallyl isocyanurate or triallylcyanurate. The coating compsn. opt. contains a stabiliser (e.g. PbO, CaO, MgO, Al2O3, TiO2, Sb2O3, PCl5, etc.), a filler (e.g. carbon black, Al silicate, anhydrous SiO2, Mg silicate, CaCO3, Ca silicate, etc.), colourant, antioxidant, lubricant, etc..

- ADVANTAGE - The coated wire has high rigidity and forms no foam or agglomeration during the extrusion and has good appearance. (Dwg.0/0)

PN - JP4329212 A 921118 DW9301 H01B7/02 004pp

PR - JP910098712 910430

PA - (HITD) HITACHI CABLE LTD

MC - A04-C04 A04-E09 A04-E10B A04-F06E A04-G08A A04-G09 A07-A02B A08-C01 A10-C03 A11-B05 A11-C02B A11-C02C A12-E02A G02-A02A L03-A L03-A01B3

- X12-D03D X12-E02B

DC - A18 A82 A85 G02 L03 X12

IC - C08F285/00 ;C08F291/00 ;H01B3/44 ;H01B7/02 ;H01B7/18 ;H01B7/34

AN - 93-002962 [01]

======= PAJ =======

TI - FLUORINE-CONTAINING ELASTIC-MATERIAL COATED ELECTRIC WIRE

AB - PURPOSE:To provide a fluorine-containing elastic-material coated electric wire of which a coating material is improved and which is therefore subjected to no foaming or no production of any grain when extrusion-worked, thus exhibiting a good surface appearance and a superior toughness.

- CONSTITUTION:A coating layer is formed by a composition wherein 5 to 100 weight part of ethylene-vinylacetate based copolymer, etc., and 0.5 weight part or more of crosslinking agent are added to 100 weight part of a mixture of a graft polymer, prepared by grafting a tetrafluoroethylene-propylene based copolymer, and polyvinylidene fluoride in the weight ratio of 90/10 to 10/90. Radiation rays are irradiated onto this coating layer. The above-identified electric wire which is subjected to no foaming in being machined and is superior in toughness is obtained. Use of this electric wire provides an advantage that the operating efficiency and economy are enhanced.

PN - JP4329212 - 921118

PD - 92-11-18

ABD - 930402

ABV - 017173

AP - JP910098712 910430

GR - E1345

PA - HITACHI CABLE LTD

IN - NAKABASHI MASANOBU; others: 02

I - H01B7/02; C08F285/00; C08F291/00; H01B3/44; H01B7/18

SI - H01B7/34